

**CLAIMS**

We Claim:

1. A method for managing diseases and wellness online, the method comprising:
  - receiving patient data over a network from a user regarding a health condition;
  - filtering the patient data according to a first database to produce filtered patient data;
  - performing an analysis of the patient data; and
  - outputting, in response to the received patient data, a medical recommendation of the health condition based on a second database, wherein the medical recommendation includes what the user is suggested to do in regarding to the health condition.
2. The method of Claim 1, wherein the receiving of the patient data comprises:
  - verifying the user by looking up an account associated with the user;
  - requiring the user to set up the account if the account can not be verified; and
  - composing a number of questions based on the first database in conjunction with the account if the account can be verified.
3. The method of Claim 2, wherein the account lists the health condition about the user and wherein the first database includes common knowledge database about the health condition, the knowledge database being constantly updated with other related servers on the network.

4. The method of Claim 3, wherein the patient data includes answers from the user to the questions.

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5. The method of Claim 1, wherein the receiving of the patient data comprises receiving diagnostic data from a diagnostic test device.

6. The method of Claim 1, wherein the patient data includes diagnostic data from a diagnostic test device.

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7. The method of Claim 1, wherein the first database includes common knowledge database about the health condition, the knowledge database being constantly updated with other related servers on the network, and the filtering of the patient data according to the first database comprises discarding some of the patient data that are not so related to the health condition; and requesting correction or verification on other of the patient data when the other of the patient data appears abnormal according to the first database.

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8. The method of Claim 7, wherein the analysis includes a statistical analysis and a medical analysis of the patient data.

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9. The method of Claim 8, wherein the performing of the analysis of the patient data comprises:

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obtaining statistical features of the patient data through the statistical analysis;

determining possible causes related to the health condition out of the patient data in conjunction with the statistical features.

10. The method of Claim 9, wherein the statistical analysis includes a fundamental statistics, a data variability analysis, and a trend forecasting.

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11. The method of Claim 10, wherein some of the statistical features by the fundamental statistics include mean, mode, max, min, ratios and fractions to determine an appropriate sorting algorithm.

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12. The method of Claim 10, wherein the variability analysis determines how significant the patient data is as well as the patient data is distributed.

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13. The method of Claim 10, wherein the trend forecasting includes a projection of the patient data, computation of trends with respect to the patient data using one or more mathematical methods.

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14. The method of Claim 13, wherein the one or more mathematical methods include one or more of linear and/or non-linear regression techniques, curve-fitting methods and numerical analyses.

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15. The method of Claim 8, wherein the performing of the analysis of the patient data comprises, through the medical analysis, evaluating a state of the health condition using a medically related logic, risk stratification, and protocols/algorithms/guidelines that pertain to the health condition.

- 5 16. The method of Claim 15, wherein the medically related logic is a medical modeling logic that simulates a medical decision-making process and is based on general medical decision making principles.
- 10 17. The method of Claim 15, wherein the medically related logic is a medical modeling logic that is based on branch/tree logic and hash or hash-like array memory structures.
- 15 18. The method of Claim 1, wherein the second database is a medical management knowledgebase including static and/or dynamic information from multiple sources pertaining to the health condition.
- 20 19. The method of Claim 18, wherein the health condition includes one of a chronic disease and/or a health question.
- 25 20. The method of Claim 1, wherein the receiving of the patient data over the network comprises:
  - maintaining an account associated with the user; and
  - updating the account with the patient data related to the health condition.
- 30 21. A method for managing diseases and wellness online, the method comprising:
  - maintaining an account associated with a user having a health condition;
  - receiving over a network a request from the user to access the account;

5           composing a number of questions from the account after the user is  
          authenticated;  
          receiving data from the user in response to the questions, wherein  
          the data includes answers to the questions and/or diagnostic data  
          received from a diagnostic test device pertaining to the health  
10          condition;  
          filtering the patient data according to a first database to produce  
          filtered patient data, wherein the first database includes common  
          knowledge database about the health condition and is being  
          constantly updated with other related servers on the network;  
15          performing an analysis of the patient data; and  
          providing to the user a medical recommendation of the health  
          condition based on a second database, wherein the medical  
          recommendation includes what the user is suggested to do in  
          regarding to the health condition.

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22. The method of Claim 21, wherein the second database is a medical  
management knowledgebase including static and/or dynamic  
information from multiple sources pertaining to the health condition.

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23. The method of Claim 22, wherein the health condition includes one of a  
chronic disease and a health question.

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24. The method of Claim 21, wherein the account is maintained in a server  
coupled to the network, and wherein the request is generated from a  
terminal device being used by the user, the request being an IP request  
including an address identifying the server.

- 5 25. The method of Claim 24, wherein the terminal device is capable of data communication with the server over the network and includes a display screen to display the medical recommendation.
- 10 26. The method of Claim 25, wherein the terminal device is selected from a group consisting of a personal computer, a network enabled cellular phones, a portable computing device and a personal digital assistant.
- 15 27. The method of Claim 24, wherein the medical recommendation is in a format of a markup language displayable on the terminal device.
- 20 28. The method of Claim 21, wherein the composing of the number of questions comprises generating the questions about the user in reference to the health condition and further in reference to the first database.
- 25 29. The method of Claim 21, wherein the performing of the analysis of the patient data comprises:  
obtaining statistic features of the patient data through the statistic analysis;  
determining possible causes related to the health condition out of the patient data in conjunction with the statistic features.
- 30 30. The method of Claim 29, wherein the statistical analysis includes a fundamental statistics, a data variability analysis, and a trend forecasting.

- 5 31. The method of Claim 30, wherein some of the statistic features by the  
fundamental statistics include mean, mode, max, min, ratios and  
fractions to determine an appropriate sorting algorithm.
- 10 32. The method of Claim 30, wherein the variability analysis determines  
how significant the patient data is as well as the patient data is  
distributed.
- 15 33. The method of Claim 30, wherein the trend forecasting includes a  
projection of the patient data, computation of trends with respect to the  
patient data using one or more mathematical methods.
- 20 34. The method of Claim 33, wherein the one or more mathematical  
methods include one or more of linear and/or non-linear regression  
techniques, curve-fitting methods and numerical analyses.
- 25 35. The method of Claim 21, wherein the performing of the analysis of the  
patient data comprises, through the medical analysis, evaluating a state  
of the health condition using a medically related logic, risk stratification,  
and protocols/algorithms/guidelines that pertain to the health condition.
- 30 36. The method of Claim 35, wherein the medically related logic is a  
medical modeling logic that simulates a medical decision-making  
process and is based on general medical decision making principles.
37. The method of Claim 35, wherein the medically related logic is a  
medical modeling logic that is based on branch/tree logic and/ hash or  
hash-like array memory structures.

38. A machine-readable medium embodying instructions for execution by a processor, the instructions, when executed by the processor, causing the processor to produce structured documents, the machine-readable medium comprising:

10           program code for receiving patient data over a network from a user  
              regarding a health condition;  
              program code for filtering the patient data according to a first  
              database to produce filtered patient data;  
              program code for performing an analysis of the patient data; and  
15           program code for outputting, in response to the received patient  
              data, a medical recommendation of the health condition based on  
              a second database, wherein the medical recommendation  
              includes what the user is suggested to do in regarding to the  
              health condition.

20           39. The machine-readable medium of Claim 38, wherein the program code  
              for receiving the patient data comprises:

              program code for verifying the user by looking up an account  
              associated with the user;  
25           program code for requiring the user to set up the account if the  
              account can not be verified; and  
              program code for composing a number of questions based on the  
              first database in conjunction with the account if the account can  
              be verified.

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40. The machine-readable medium of Claim 37, wherein the account lists  
the health condition about the user and wherein the first database

5 includes common knowledge database about the health condition, the  
knowledge database being constantly updated with other related servers  
on the network.

10 41. The machine-readable medium of Claim 40, wherein the patient data  
includes answers from the user to the questions.

15 42. The machine-readable medium of Claim 37, wherein the program code  
for receiving the patient data comprises program code for receiving  
diagnostic data from a diagnostic test device.

20 43. The machine-readable medium of Claim 38, wherein the patient data  
includes diagnostic data from a diagnostic test device.

25 44. The machine-readable medium of Claim 38, wherein the first database  
includes common knowledge database about the health condition, the  
knowledge database being periodically updated with other related  
servers on the network, and the program code for filtering the patient  
data according to the first database comprises program code for  
discarding some of the patient data that are not so related to the health  
condition; and program code for requesting correction or verification on  
other of the patient data when the other of the patient data appears  
abnormal according to the first database.

30 45. The machine-readable medium of Claim 44, wherein the analysis  
includes a statistical analysis and a medical analysis of the patient data.

5           46. The machine-readable medium of Claim 45, wherein the program code  
for performing the analysis of the patient data comprises:

program code for obtaining statistical features of the patient data  
through the statistical analysis; and

10           program code for determining possible causes related to the health  
condition out of the patient data in conjunction with the statistical  
features.

15           47. The machine-readable medium of Claim 46, wherein the statistical  
analysis includes a fundamental statistics, a data variability analysis,  
and a trend forecasting.

20           48. The machine-readable medium of Claim 47, wherein some of the  
statistical features by the fundamental statistics include mean, mode,  
max, min, ratios and fractions to determine an appropriate sorting  
algorithm.

25           49. The machine-readable medium of Claim 47, wherein the variability  
analysis determines how significant the patient data is as well as the  
patient data is distributed.

50           50. The machine-readable medium of Claim 49, wherein the one or more  
mathematical methods include one or more of linear and/or non-linear  
regression techniques, curve-fitting methods and numerical analyses.

30           51. The machine-readable medium of Claim 45, wherein the program code  
for performing the analysis of the patient data comprises, through the  
medical analysis, evaluating a state of the health condition using a

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medically related logic, risk stratification, and  
protocols/algorithms/guidelines that pertain to the health condition.

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52. The machine-readable medium of Claim 51, wherein the medically  
related logic is a medical modeling logic that simulates a medical  
decision-making process and is based on general medical decision  
making principles.

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53. The machine-readable medium of Claim 51, wherein the medically  
related logic is a medical modeling logic that is based on branch/tree  
logic and hash or hash-like array memory structures.

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54. The machine-readable medium of Claim 38, wherein the second  
database is a medical management knowledgebase including static  
and/or dynamic information from multiple sources pertaining to the  
health condition.